

ACADEMIC CURRICULUM VITAE

# Simone Domenico Guglielmetti

Full Professor of Food and Agricultural Microbiology (S.S.D. AGR/16) at the Department of Biotechnology and Biosciences (BtBs), Università degli Studi di Milano-Bicocca, Italy

## I. EDUCATION AND EMPLOYMENT

- Simone Domenico Guglielmetti (SG) graduated cum laude in Food Science and Technology at the University of Milan in 2001.
- In 2003, SG worked as a guest researcher at the University of Turku (Finland) for 6 months.
- In February 2005, SG earned a PhD in Food Biotechnology with a dissertation entitled “Biodiversity and Cell Surface Properties of Human Intestinal Bifidobacteria and Construction of Molecular Instruments for Their Genetic Modification”.
- In 2005, SG began working with a permanent position as a researcher and lecturer at the Department of Food, Environmental and Nutritional Sciences (DeFENS), formerly the Department of Food Science and Microbiology (DiSTAM), Faculty of Agriculture and Food Sciences, Università degli Studi di Milano.
- Since March 2015, SG has held the position of Associate Professor at the Department of Food, Environmental, and Nutritional Sciences (DeFENS, University of Milan).
- Since June 2015, SG has been an Adjunct Professor of General Microbiology at Tampere University (formerly Tampere University of Technology) in Finland.
- Since November 2023, SG has held the position of Full Professor at the Department of Biotechnology and Biosciences (BtBs, University of Milano-Bicocca).

## II. TEACHING ACTIVITY

- Since the academic year 2008/2009, SG has been entrusted with teaching assignments for several courses at the University of Milan:
  - 2008-2015 - “*Microbiologia Generale*” (General Microbiology), Fundamental course in the bachelor’s degree program in “*Viticultura ed Enologia*” (Viticulture and Oenology).
  - 2009-2021 - “*Microrganismi Probiotici: Biotecnologie e Applicazioni*”, Optional course (free choice) for students in the master’s degree programs of the Faculty of Agricultural and Food Science.
  - 2015-2023 - “*Microbiologia*” (Microbiology), Fundamental course in the bachelor’s degree program in “*Viticultura ed Enologia*” (Viticulture and Oenology).
  - 2016-2023 - “*Ecologia del microbiota umano*” (Ecology of the human microbiota), Fundamental course in the master’s degree program in “*Alimentazione e Nutrizione Umana*” (Human Nutrition and Food Science).
  - 2022-2023 - “*Probiotic science and applications*”, Optional course (free choice) for students in the master’s degree programs of the Faculty of Agricultural and Food Science.
- Since February 2008, Prof. Guglielmetti carries out teaching activities (as invited lecturer until 2015 and Adjunct Professor from 2016) at Tampere University (Finland) for the course Microbiology II (Industrial Microbiology) of the master’s degree Program in Biotechnology.
- During his didactical activity, SG has been the supervisor of more than 80 bachelor’s and master’s degree theses for several University degree programs, including Food Science and

Technology, Human Nutrition, Agricultural-Environmental-Food Biotechnology, Viticulture and Enology, and Pharmaceutical Biotechnology.

- SG has been supervisor of two PhD candidates in Food Biotechnology, and three PhD students in Food Systems. SG is now the supervisor of three PhD candidates in Food Systems (University of Milan).

### III. SCIENTIFIC ACTIVITY

SG is primarily interested in applied microbiology and microbial biotechnology related to food, probiotic and host-associated microorganisms. More specifically, the research interests of SG are focused on understanding the interactions between microorganisms and their hosts, developing new functional foods and biotechnological strategies for the food industry, and advancing our understanding of microbial genetics.

The research interests of SG include the following topics:

- **Study of the interaction of food, probiotic, and host-associated bacterial strains with the human host and animal models**
  - Study of the immunomodulatory properties of bifidobacteria and lactic acid bacteria and identification of their cell components that mediate the interaction with the host's immune system.
  - Characterization of bacterial adhesion to host epithelia and identification of the molecular determinants in bifidobacteria and lactic acid bacteria.
- **Study of the microbial ecosystems associated with the human host and animal models by means of metataxonomics, metabolomics, and quantification of microbial metabolites**
  - Study of the impact of dietary patterns and specific food components on the intestinal microbiome, with particular attention to food polyphenols.
  - Study of the impact of the oral intake of probiotic products on the intestinal and vaginal microbiomes.
  - Characterization of the intestinal microbiomes in specific physiological and metabolic conditions, with reference to intestinal functional disorders and gut permeability.
- **Functional characterization and implementation of microbial strains for the food and probiotic industry**
  - Valorization of probiotic microbial strains for their industrial application in products with higher added value.
  - Use of microorganisms for the development of industrially relevant biotransformations and novel functional foods.
  - Study of the persistence in the human gastrointestinal tract of probiotic strains administered through commercially available food supplements.

Other research interests:

- Characterization of natural plasmids in bacteria of food, probiotic, and agricultural interest, and development of molecular tools for their study.
- Study of microbial ecosystems associated with food.

- Contribution to the development of terminology and quality control practices in the field of "biotic" products.

SG's research activity also includes scientific collaborations with the following individuals and institutions:

- Professor Matti Karp and Professor Ville Santala, Tampere University (Finland) - collaboration on the development and use of microbial cell reporter systems based on bioluminescence and fluorescence.
- Professor Elena Comelli, University of Toronto (Canada) - collaboration on the study of the effect of probiotics on the physiology and metabolism of the host in animal models, with particular attention to the gut microbiota composition and host miRNA interactions.
- Dr. Elda Tagliabue, Professor Lucia Sfondrini, and Dr. Tiziana Triulzi, Istituto Nazionale dei Tumori (Milan, Italy) - collaboration on the study of the role of host-associated microbiomes in influencing the progression and response to therapies of breast and lung cancers.
- Professor Fabio Grassi, Istituto di Ricerca in Biomedicina, Bellinzona (Switzerland) - collaboration on the study of the role of the gut microbiota in mediating the effect of the apyrase enzyme on mucosal immunity cancers.
- SG has also been involved in several projects at the Humanitas Research Hospital (Milan, Italy), providing expertise related to the characterization of host-associated microbiomes in different health conditions.

#### IV. SCIENTIFIC PRODUCTIVITY

SG's research activity is documented by over 120 publications in peer-reviewed international journals with impact factors. In addition, SG has co-authored two chapters in international scientific books and is an inventor of six international patents.

As of November 20<sup>th</sup>, 2023, Scopus reports the following citation metrics:

- Number of publications: 127
- Total citations: 4939
- H index: 37
- i10-index: 85

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#### V. OTHER ACADEMIC ROLES AND ACHIEVEMENTS

- In January 2014, SG obtained the Associate Professor habilitation in the Italian National Scientific Habilitation (ASN 2012) for the scientific sector AGR/16: Agricultural Microbiology.
- In December 2014, SG obtained the Associate Professor habilitation in the Italian National Scientific Habilitation (ASN 2013) for the scientific sector BIO/19: General Microbiology.
- Since April 2015, SG has served as the departmental reference person and member of the University board on Open Science policy.

- In March 2015, SG obtained the position of Adjunct Professor of General Microbiology at Tampere University (formerly Tampere University of Technology) in Finland.
- SG has been a member of the Agricultural Library Council since July 2016.
- In June 2017, SG obtained the Full Professor habilitation in the Italian National Scientific Habilitation (ASN 2016) for the scientific sector AGR/16: Agricultural Microbiology.
- SG has been a member of the Faculty since 2013 and member of the Operative Board since 2021 for the Doctorate in Food Systems Sciences.
- Since July 2022, SG has been a member of the Italian team of experts on microbiomes, specifically the "food-associated microbiomes group, organized by the European Food Safety Authority (EFSA) with the primary objective to prepare a position paper that focuses on the risk assessment questions related to microbiomes.

## VI. PARTICIPATION TO ITALIAN OR INTERNATIONAL PROJECTS

- 2023, Call: Programma Nazionale di Ricerca e Progetti di Rilevante Interesse Nazionale (PRIN) 2022. Project title: We all eat microbes: diet as reservoir of microorganisms that preserve the ecosystem services of the human gastrointestinal microbiota (the  $\mu$ BEat project). Duration: 24 months. Role: Principal Investigator.
- 2020, Call: HUB Ricerca e Innovazione by the Lombardy region. Project title: MIND FoodS Hub/Concept innovativo per l'eco-intensificazione delle produzioni agrarie e per la promozione di modelli alimentari per la salute e la longevità dell'uomo attraverso la creazione in MIND di un food system digital Hub. Duration: 30 months. Role: Co-investigator (coordinator of the microbiology research unit)
- 2018, Call: AIRC Individual Grant - IG 2017. Project title: Understanding the contribution of gut microbiota in trastuzumab activity to improve drug. Duration: 5 years. Role: Co-investigator
- 2017, Call: AIRC call for proposal 2015. Project title: Blood microbiota and diet in relation to adenoma and colorectal cancer risk. Duration: 36 months. Role: Co-investigator
- 2016, Call: JPI HDHL Joint Action Intestinal Microbiomics (fund from MIPAAF). Project title: Gut and blood microbiomics for studying the effect of a polyphenol-rich dietary pattern on intestinal permeability in the elderly (MaPLE). Duration: 36 months. Role: Co-Principal Investigator (together with prof. Patrizia Riso)
- 2012, Call: Fondazione Cariplo, International Recruitment Call 2010. Project title: *"Effetto di una dieta ricca in antociani e polifenoli sul microbiota intestinale e sulla modulazione della funzione immunitaria ed endoteliale"*. Duration: 12 months. Role: Co-investigator
- 2011, Call: Fondo per la promozione di accordi istituzionali by Lombardy region. Project title: *"Biogesteca"/Piattaforma di biotecnologie verdi e di tecniche gestionali per un sistema agricolo ad elevata sostenibilità ambientale finanziato da Regione Lombardia*. Duration: 36 months. Role: Co-investigator
- 2011, Call: European Project FP7-KBBE-2008-2B. Project title: Confronting the clinical relevance of biocide induced antibiotic resistance. Duration: 36 months. Role: Co-investigator
- 2011, Call: Fondazione Cariplo, Scientific Research in Biomedicine 2010 (grant 2010-0678). Project title: Role of interleukin 2 and probiotics in modulating cancer immunosurveillance:

identification of new therapeutic strategies. Duration 36 months. Role: Research Unit Coordinator

## VII. SPEAKER AT SCIENTIFIC CONFERENCES (LAST 10 YEARS)

### INTERNATIONAL CONFERENCES

- 2023, September 16-19. **12<sup>th</sup> Probiotics, Prebiotics & New Foods**, Rome. Title of Talk: *“MICROBIOTA AND ITS MODULATION IN IBS - Microbiota signatures”*.
- 2023, September 16-19. **12<sup>th</sup> Probiotics, Prebiotics & New Foods**, Rome. Title of Talk: *“Bridging Research and Industry on Non-Viable Health-Promoting Agents from Microbes: Proposal for a classification”*.
- 2023, June 20-22. **International Probiotic Conference IPC 2023**, Bratislava. Title of Talk: *“Bridging Research and Industry on Health-Promoting Agents from Non-Viable Microbes: Toward a Shared Consensus on Terminology and Definitions”*.
- 2022, March 28-30. **Probiota Global Congress 2022**, Copenhagen. Title of Talk: *“What’s in a name? Working towards the best definition for postbiotics”*.
- 2022, June 20-22. **IBS Days**, Bologna. Title of Talk: *“The Faecal Abundance of Collinsella aerofaciens and other potential pathobionts may predict the clinical efficacy of the probiotic Lactobacillus paracasei DG in non-constipated IBS patients”*.
- 2022, July 6-7. **Microbiome Connect Europe**, Amsterdam. Title of Talk: *“What’s after life? Paraprobiotics and postbiotics: from research to applications”*.
- 2019, November 8. **1° Regional Meeting ENTEROLACTIS: past, present and future of microbiota and probiotics: the evolution of research**, Dubai. Title of the talk: *“How to Evaluate a Good Probiotic”*.
- 2019, November 21-22. **MIBIOC, the way of the microbiota in cancer**, Milan, The Netherlands. Title of Talk: *“Overview of the methodological aspects to investigate taxonomy and functionality of the intestinal microbial ecosystem”*.
- 2018,
- 2017, September 10-12. **9<sup>th</sup> Prebiotics, Probiotics and New Foods**, Rome, Title of Talk: *“Bifidobacteria. Bifidobacterium bifidum-host interaction as a paradigm of the holobiont vision of the human being”*.
- 2015, October 13-15. **Berry Health Benefits Symposium**, Madison (WI). Title of Talk: *“The role of microbes in the relationship between berries and human health”*.

### NATIONAL CONFERENCES

- 2022, September 22-24. **Disturbi Cronici Gastrointestinali**, Rome. Title of Talk: *“Quale l’utilità di valutare il metaboloma intestinale?”*.
- 2022, October 6. **Il microbioma nelle fasi di vita della donna: attualità e prospettive**, Milan. Title of Talk: *“Ecologia microbica vaginale: perché è così unica”*.
- 2022, November 25-26. **1° Congresso ItPROM: il mondo dei Probiotici Prevenzione e terapia**, Rome. Title of Talk: *“Il microbioma intestinale e la sua funzione”*.
- 2019, September 19-21. **Disturbi Cronici Gastrointestinali**, Rome. Title of Talk: *“Ricostituire l’eubiosi. The intestinal microbial ecosystem, probiotics and dysbiosis in IBS”*.

- 2018, May 4. *Congresso Nazionale di Ginecologia*, Pescantina. Title of the talk: “*Il microbiota vaginale: ecologia e interazione con l’ospite*”.
- 2017, December 12. *Convegno microbi e cancro: amici o nemici*, Fondazione IRCCS Istituto Nazionale dei Tumori, Milano. Title of Talk: “*Ecosistemi microbici nell’uomo*”.
- 2017, April 20-21. *NUtriMI, XI Forum di Nutrizione Pratica*, Milan. Title of Talk: “*Il microbiota intestinale nel rapporto tra dieta e salute*”.
- 2017, July 1. *Convegno della Società Italiana di Nutrizione Umana (SINU)*. Turin, Title of Talk: “*Ghost probiotics: efficacia e sicurezza dell’impiego dei paraprobiotici per la salute umana*”.
- 2015, September 24-26. *Disturbi Cronici Gastrointestinali*, Rome. Title of Talk: “*Modificazione del microbiota come terapia: i lattobacilli*”.
- 2015, November 28. *News in gastroenterologia*, Salerno. Title of Talk: “*Il microbioma*”.

## VIII. TECHNOLOGY TRANSFER AND INDUSTRY ENGAGEMENT ACHIEVEMENTS

- SG is the author of five international patents (PTC and EP) in collaboration with industrial partners (see list in section X).
- Since 2019, collaboration with Sofar S.p.A. for the establishment and development of a research center at Kilometro Rosso in Stezzano (Bergamo) focused on the study of probiotic microorganisms and human-associated microbiomes. The collaboration also aims to provide pre- and post-graduate training opportunities for university students in microbiological and related fields. Link to an interview with SG on the topic:  
[https://www.youtube.com/watch?v=Us94lcQChCc&ab\\_channel=SOFAR](https://www.youtube.com/watch?v=Us94lcQChCc&ab_channel=SOFAR)
- In 2017, SG facilitated the sale of a microbial probiotic strain (*Bifidobacterium bifidum* MIMBb23sg) to a Italian pharmaceutical enterprise through the technology transfer office of the University of Milan. The contract provided for a 4% royalty payment to the University of Milan.
- In 2015, SG facilitated the licensing of the use of two probiotic strains for the oral cavity (*Lactobacillus helveticus* MIMLh5 and *Streptococcus salivarius* ST3) to an Italian pharmaceutical company through the technology transfer office of the University (UNIMITT). The contract provided for a 7% royalty payment to the University of Milan.
- In 2013, SG facilitated the sale of a microbial probiotic strain (*Bifidobacterium bifidum* BB04) to an Italian company that produces dairy starters and probiotics through the technology transfer office of the University of Milan (UNIMITT). The contract provided for a 4% royalty payment to the University of Milan.
- In 2011, SG facilitated the sale of a microbial probiotic strain (*Bifidobacterium bifidum* MIMBb75) to a German pharmaceutical company through the technology transfer office of the University of Milan (UNIMITT). The contract provided for a 1% royalty payment to the University of Milan.
- In the past five years, SG has been responsible for more than 20 research collaboration contracts and service activities with private pharmaceutical and food companies.

- SG also works as a consultant for food and pharmaceutical companies, including Perfetti-Van Melle S.p.A., Sofar S.p.A., and Alfasigma S.p.A.

## IX. MEDIA AND PUBLIC ENGAGEMENT (LAST 10 YEARS)

- 2022, July 20. Video interview for the online magazine *MicrobiomePost.com* titled “*Inactivated microbes could pave the way to next generation probiotics approval*”. Link to the interview: <https://microbiomepost.com/inactivated-microbes-could-pave-the-way-to-next-generation-probiotics-approval/>
- 2022, August 2. Interview for the online magazine *Microbioma.it* in the article titled “*IBS: individuato per la prima volta possibile marker di efficacia per L. paracasei DG*”. Link to the interview: <https://microbioma.it/gastroenterologia/ibs-individuato-per-la-prima-volta-possibile-marker-di-efficacia-per-l-paracasei-dg/>
- 2022, February 18. Interview for the online magazine *NutraIngredients.com* in the article titled “*Probiota 2022: pondering on all things postbiotic...*”. Link to the article: <https://www.nutraingredients.com/Article/2022/02/17/Probiota-2022-Pondering-on-all-things-postbiotic>
- 2021, November 30. Interview for the online magazine *NutraIngredients.com* in the article titled “*Probiotic increases absorption and bioavailability of Vit D*”. Link to the article: <https://www.nutraingredients.com/Article/2021/11/30/Probiotic-increases-absorption-and-bioavailability-of-Vit-D>
- 2021, November 16. Video interview for the online magazine *Microbioma.it* titled “*Leaky gut: dieta ricca in polifenoli riduce la permeabilità intestinale*”. Link to the interview: <https://microbioma.it/video/simone-guglielmetti-leaky-gut-dieta-ricca-in-polifenoli-riduce-la-permeabilita-intestinale/>
- 2021, November 10. Interview for *andkronos* published under the title: “*Il microbiologo: "Grazie al probiotico aumenta l'assorbimento della vitamina D"*”. Link to the article: [https://www.adnkronos.com/il-microbiologo-grazie-al-probiotico-aumenta-l-assorbimento-della-vitamina-d\\_7D7dGkCg9w4t4yfZEnTWZ8](https://www.adnkronos.com/il-microbiologo-grazie-al-probiotico-aumenta-l-assorbimento-della-vitamina-d_7D7dGkCg9w4t4yfZEnTWZ8)
- 2021, March 11. Chairman for the dissemination event “*Il microbiota intestinale (una comunità di batteri per la nostra salute)*” organized by **Fondazioni AMBROSIANEUM e MATARELLI**. [https://www.youtube.com/watch?v=5byjbV048gk&ab\\_channel=FondazioneAmbrosianeum](https://www.youtube.com/watch?v=5byjbV048gk&ab_channel=FondazioneAmbrosianeum)
- 2020, May 04. Interview for the article titled “*Come utilizzare i processi di fermentazione dei cibi a beneficio della nostra salute*” by Angela Nanni, published on the newspaper **La Stampa**. Link to the interview: <https://www.lastampa.it/salute/2020/05/04/news/come-utilizzare-i-processi-di-fermentazione-dei-cibi-a-beneficio-della-nostra-salute-1.38719916/>
- 2020, May 16. Participation to the dissemination event “*Nuove visioni per le persone con disturbo dello spettro autistico: dialogo tra laboratorio e psicoeducazione*” (**Associazione L'abilità ONLUS**, Milano) with a seminar titled: “*L'asse microbiota-intestino-cervello: l'influenza dei microrganismi intestinali sul sistema nervoso centrale e sulle funzioni cognitive*”.
- 2019, January 9. Interview for the article titled “*Cibi fermentati: cosa sono e perché fanno bene*” published by the online magazine **OK salute e benessere**. Link to the interview: <https://www.ok-salute.it/alimentazione/cibi-fermentati-cosa-sono-e-perche-fanno-bene/>
- 2017. Reviewer of the guidelines “*Protocollo sui criteri di selezione e sul consiglio razionale dei PROBIOTICI in farmacia*” edited by the “**Società Italiana di Farmacia Clinica**” (**SIFAC**). Link

to the document: [http://sifac.it/wp-content/uploads/2017/07/Protocollo-Probiotici-in-Farmacia\\_SIFAC.pdf](http://sifac.it/wp-content/uploads/2017/07/Protocollo-Probiotici-in-Farmacia_SIFAC.pdf)

- 2017, March 17. Interview for the article titled “*Latte fermentato e yogurt: in che misura fanno bene alla salute*” by Angela Nanni, published on the newspaper **La Stampa**. Link to the interview: <https://www.salute.eu/2017/03/14/news/latte-fermentato-e-yogurt-in-che-misura-fanno-bene-a-la-salute-266888474/>
- 2014, September 16. Interview for the online magazine **NutraIngredients.com** in the article titled “*L. paracasei may alter intestinal microbiota in healthy people: Study*”. Link to the article: <https://www.nutraingredients.com/Article/2014/09/17/Probiotic-L.-paracasei-may-alter-intestinal-microbiota>

## X. LIST OF PUBLICATIONS

### International patents

- **GUGLIELMETTI S**, Mora D. (2007). Preparation of polyfunctional fermented food products. University of Milan. European Patent Application 27<sup>th</sup> April 2007, EP 07008593.1. Patent Cooperation Treaty Application number: PCT/EP2008/003267.
- Ricchiuto GM, Gardana C, **GUGLIELMETTI S**. (2011). Process for obtaining non-allergic propolis. International Patent Application 22nd September 2011. **WO2011114291A1**.
- **GUGLIELMETTI S**, Mora D. (2011). *Bifidobacterium bifidum* strains for application in gastrointestinal diseases. European Patent Application 26th April 2011, EP 11000744.0. **WO2012104226A1**
- Biffi A, Rossi R, Fiore W, **GUGLIELMETTI S**. (2014). Use of a preparation including microorganisms to increase the intestinal production of butyric acid, folic acid or niacin, and/or to decrease the intestinal production of succinic acid. Patent Cooperation Treaty Application number: PCT/IB2014/064285. **WO2015033305A1**
- Biffi A, Rossi R, Fiore W, **GUGLIELMETTI S**. (2014). Method to evaluate the effects on the intestinal microbiota of a preparation including microorganisms. Patent Cooperation Treaty Application number: PCT/IB2014/064284. **WO2015033304A1**
- Biffi A, Rossi R, Fiore W, **GUGLIELMETTI S**, Balzaretto S. (2017). Exopolysaccharides and uses thereof. Patent Application **WO2018100549A1**.

### Articles in international peer-reviewed journals (last 5 years, selected)

\* = corresponding author

Article
1. * <b>GUGLIELMETTI S</b> . Safety considerations in the use of nonviable microbial cells as health-promoting agents in food and dietary supplements. <i>Current Opinion in Food Science</i> 2023;101105.
2. Gargari G, Mantegazza G, Taverniti V, Gardana C, Valenza A, Rossignoli F, Barbaro MR, Marasco G, Cremon C, Barbara G, * <b>GUGLIELMETTI S</b> . Fecal short-chain fatty acids in non-constipated irritable bowel syndrome: a potential clinically relevant stratification factor based on catabotyping analysis. <i>Gut Microbes</i> . 2023 Dec;15(2):2274128.
3. Mantegazza G, Duncan R, Telesca N, Gargari G, Perotti S, Riso P, * <b>GUGLIELMETTI S</b> . Lactic acid bacteria naturally associated with ready-to-eat rocket salad can survive the human gastrointestinal transit. <i>Food Microbiology</i> 2024;118:104418.
4. Mantegazza G, Gargari G, * <b>GUGLIELMETTI S</b> . Editorial: bacterial gut symbionts as live biotherapeutic agents in irritable bowel syndrome-a rosy future despite potential long-term safety concerns. <i>Alimentary Pharmacology &amp; Therapeutics</i> . 2023 Feb;57(3):345-346.
5. Mantegazza G, Dalla Via A, Licata A, Duncan R, Gardana C, Gargari G, Alamprese C, Arioli S, Taverniti V, Karp M, * <b>GUGLIELMETTI S</b> . Use of kefir-derived lactic acid bacteria for the preparation of a fermented soy drink with increased estrogenic activity. <i>Food Research International</i> . 2023 Feb;164:112322.



6.	Mantegazza G, Gargari G, Duncan R, Consalez F, Taverniti V, Riso P, <b>*GUGLIELMETTI S.</b> Ready-to-eat rocket salads as potential reservoir of bacteria for the human microbiome. <i>Microbiology Spectrum</i> . 2023 Feb 14;11(1):e0297022.
7.	Brunelli L, De Vitis V, Ferrari R, Minuzzo M, Fiore W, Jäger R, Taverniti V, <b>*GUGLIELMETTI S.</b> In vitro assessment of the probiotic properties of an industrial preparation containing <i>Lacticaseibacillus paracasei</i> in the context of athlete health. <i>Front Pharmacol</i> . 2022 Aug 9;13:857987.
8.	Perruzza L, Strati F, Raneri M, Li H, Gargari G, Rezzonico-Jost T, Palatella M, Kwee I, Morone D, Seehusen F, Sonogo P, Donati C, Franceschi P, Macpherson AJ, <b>GUGLIELMETTI S</b> , Greiff V, Grassi F. Apyrase-mediated amplification of secretory IgA promotes intestinal homeostasis. <i>Cell Reports</i> 2022;40.
9.	Gargari G, Taverniti V, Del Bo' C, Bernardi S, Hidalgo-Liberona N, Meroño T, Andres-Lacueva C, Kroon PA, Cherubini A, Riso P, <b>*GUGLIELMETTI S.</b> Higher bacterial DNAemia can affect the impact of a polyphenol-rich dietary pattern on biomarkers of intestinal permeability and cardiovascular risk in older subjects. <i>European Journal of Nutrition</i> 2022;61:1209-20.
10.	Castagliuolo I, Scarpa M, Brun P, Bernabe G, Sgheddu V, Elli M, Fiore W, De Vitis V, <b>*GUGLIELMETTI S.</b> Co-administration of vitamin D3 and <i>Lacticaseibacillus paracasei</i> DG increase 25-hydroxyvitamin D serum levels in mice. <i>Annals of Microbiology</i> 2021;71.
11.	Taibi A, Ku M, Lin Z, Gargari G, Kubant A, Lepp D, Power KA, <b>GUGLIELMETTI S</b> , Thompson LU, Comelli EM. Discriminatory and cooperative effects within the mouse gut microbiota in response to flaxseed and its oil and lignan components. <i>Journal of Nutritional Biochemistry</i> 2021;98.
12.	Gargari G, Mantegazza G, Taverniti V, Del Bo' C, Bernardi S, Andres-Lacueva C, González-Domínguez R, Kroon PA, Winterbone MS, Cherubini A, Riso P, <b>*GUGLIELMETTI S.</b> Bacterial DNAemia is associated with serum zonulin levels in older subjects. <i>Scientific Reports</i> 2021;11.
13.	Aguilar-Toalá JE, Arioli S, Behare P, Belzer C, Berni Canani R, Chatel JM, D'Auria E, de Freitas MQ, Elinav E, Esmerino EA, García HS, da Cruz AG, González-Córdova AF, <b>*GUGLIELMETTI S</b> , de Toledo Guimarães J, Hernández-Mendoza A, Langella P, Liceaga AM, Magnani M, Martin R, Mohamad Lal MT, Mora D, Moradi M, Morelli L, Mosca F, Nazzaro F, Pimentel TC, Ran C, Ranadheera CS, Rescigno M, Salas A, Sant'Ana AS, Sivieri K, Sokol H, Taverniti V, Vallejo-Cordoba B, Zelenka J, Zhou Z. Postbiotics – when simplification fails to clarify. <i>Nature Reviews Gastroenterology and Hepatology</i> 2021;18:825-6.
14.	Peron G, Gargari G, Meroño T, Miñarro A, Lozano EV, Escuder PC, González-Domínguez R, Hidalgo-Liberona N, Del Bo C, Bernardi S, Kroon PA, Carrieri B, Cherubini A, Riso P, <b>*GUGLIELMETTI S</b> , Andrés-Lacueva C. Crosstalk among intestinal barrier, gut microbiota and serum metabolome after a polyphenol-rich diet in older subjects with “leaky gut”: The MaPLE trial. <i>Clinical Nutrition</i> 2021;40:5288-97.
15.	Taverniti V, Cesari V, Gargari G, Rossi U, Biddau C, Lecchi C, Fiore W, Arioli S, Toschi I, <b>*GUGLIELMETTI S.</b> Probiotics modulate mouse gut microbiota and influence intestinal immune and serotonergic gene expression in a site-specific fashion. <i>Frontiers in Microbiology</i> 2021;12.
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